



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,522	04/30/2001	Tomoyuki Nakano	112857-221	5535
29175	7590	03/09/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			COLIN, CARL G	
			ART UNIT	PAPER NUMBER
			2136	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,522

Applicant(s)

NAKANO ET AL.

Examiner

Carl Colin

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. In response to communications filed on 12/21/2004, applicant has amended claims 14, and adds claims 21-23. The following claims 1-23 are presented for examination.

1.1 The amendments to the specification, page 2, filed on 12/3/2004 have been considered however it does not overcome the objection because it is not consistent with the drawing. For example figure 7 shows “next authentication request “ as step 6; “receive digital signature from server” at step 7.... Therefore the objection to the drawings and the specification has not been overcome by the amended specifications. The 35 USC 112 rejection has been withdrawn with respect to the amended claims.

1.2 Applicant's arguments, pages 9-11, filed on 12/3/2004, with respect to the rejection of claims 1-23 have been fully considered, but they are not persuasive. Regarding claim 1, Applicant argues that Tanaka does not perform separate authentication at one time and also argues that the claimed invention uses a common key encryption method initially and then public key encryption as a second more secure form of authentication during the process. Examiner disagrees because the independent claims do not contain these features as claimed. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., separate authentication at one time and common key encryption method initially and then public key encryption as a second more

Art Unit: 2136

secure form of authentication during the process) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant adds claims 21-23 that further limit the claimed invention. Claims 21-23 also include the limitations of claim 1. Upon further consideration a new ground of rejection is made in view of Audebert under 35 USC 102(e). Audebert discloses first authentication using a shared key, and if it is successful, performing a second authentication using asymmetrical method.

Specification

2. The disclosure is objected to because of the following informalities: it is not consistent with the drawing. For example figure 7 shows “next authentication request “ as step 6; “receive digital signature from server” at step 7.... Appropriate correction is required.

Drawings

3. Figures 6 and 7 are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the reference signs:

Figures 6 and 7 are objected to because there is a lack of consistency between the disclosure and the amended specification such as SP6, SP7, SP8, and SP9. Appropriate correction is required. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an

Art Unit: 2136

amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1 and 13 are objected to because of the following informalities: In claim 1, on the third step on the second line the number “10” should be deleted and claim 13, line 2, the number “30” should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5.1 **Claims 1-23** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,694,436 to **Audebert**.

5.2 **As per claims 1, 2, 4, 6-8, 10-18, and 20, Audebert** discloses a user authentication system, comprising: an integrated circuit card that meets the recitation of a data holding medium for holding a common key unique to a user, used in a common-key encryption method, for example (see column 21, lines 17-21); an authentication apparatus for holding the common key used in the common key encryption method and a private key used in a public-key encryption method, each unique to the user, for example (see column 21, line 45 through column 22, line 20); and discloses a PC or server (column 21, lines 10-16) that meets the recitation of an information processing apparatus and further discloses an information processing apparatus connected to the authentication apparatus in an always-communicable manner and provided with a function for performing authentication by the public-key encryption method, for example (see column 24, lines 45-50); wherein the authentication apparatus performs authentication by using the common key held by the data holding medium and the common key held by the

Art Unit: 2136

authentication apparatus, in response to a user authentication request sent from the information processing apparatus, and, only when the user has been authenticated, performs processing for making the information processing apparatus authenticate the user by using the private key corresponding to the user, for example (see column 21, line 45 through column 22, line 20).

Audebert discloses that the information processing apparatus can be performed by either the user terminal or the server authentication, and further discloses that the invention is not limited to the type of cryptographic method used. Even though one embodiment uses public key, common key can also be used for high speed processing, for example (see column 9, lines 8-25 and column 7, lines 60-67). (See also column 23, line 25 through column 24, line 10).

Claim 5 discloses the same limitation as the rejected claim 1 above. Therefore claim 5 is rejected on the same rationale as the rejection of claim 1 above.

As per claims 3, 9, and 19, Audebert discloses the limitation of wherein the information processing apparatus is a mobile communication apparatus, for example (see column 27, lines 5-18).

As per claim 21, Audebert substantially discloses A user authentication system, wherein a data holding medium for holding a common key unique to a user, used in a common key encryption method, comprising: a server for sending an authentication request to perform a service to the user (column 22, lines 21-28; column 21, lines 5-15 and lines 40-45); and a terminal module that meets the recitation of an authentication apparatus (column 21, lines 22-27)

Art Unit: 2136

comprising, a holding means for holding the common key used in a common-key encryption method for authentication between a data holding medium held by the user and the authentication apparatus, said holding means holding a private key used in a public-key encryption method to the authentication between the data holding medium and the server (column 21, line 45 through column 22, line 20); and means for authenticating the data holding medium by using the common key for the user held by the holding means and a common key used in the common-key encryption method for the user held by the data holding medium in response to the authentication request sent from the server, said authenticating means performing a processing for authentication between the data holding medium and the server by using the private key corresponding to the user when the data holding medium has been authenticated by using the common keys (column 21, line 45 through column 22, line 20). **Audebert** also discloses another embodiment that also discloses the claimed features (see column 23, line 25 through column 24, line 10).

Claims 22 and 23 disclose similar limitations to the rejected claim 21 and are therefore rejected on the same rationale as the rejection of claim 21.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2136

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

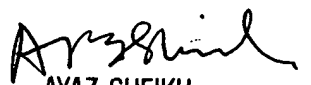
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cc

Carl Colin

Patent Examiner

March 4, 2005


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100